

CLAIMS

1. A CAD system comprising a processing information group (15) and a process definition group (18), the processing
5 information group including: a processed-body division (15a) which stores a part whose material substance is to be removed by a single or a series of processing operations, as a body for each of the process operations by pre-defined work instructions; and a process-contents division (15b)
10 which stores information about work contents of each process operation in relation to the body, the process definition group containing definitions of a plurality of process operations, upon selection from the process operations and parts to be processed (51' through 59') in
15 an original product body (50'), shape information is extracted for each of the selected parts to be processed (51'-59') and tools and parameters for processing the extracted shape are determined, a processed bodies (51-59) are generated, the generated processed bodies (51-59) are
20 stored in the processed-body division (15a), and the determined tools and parameters are stored in the process-contents division (15b).

2. The CAD system according to Claim 1, further comprising
25 a body display control unit (12) which, upon selection from displayed processed bodies (51-55), displays work contents related to the processed body.

3. The CAD system according to Claim 1 or 2, wherein the system displays area differences (A1, A2) or an interference region (A3) if there is any of the area differences (A1, A2) between the original product body and the processed bodies (51-59) generated in correspondence with the parts to be processed (51'-59'), or if the interference region (A3) exists between the processed bodies (51-59).

10 4. The CAD system according to Claim 3, wherein the area differences (A1, A2) and the interference region (A3) are displayed in respective colors or patterns specific to the kind.

15 5. The CAD system according to one of Claims 1 through 4, wherein work content data for each of the bodies (51-59) stored in the process-contents division (15b) are attribute data of corresponding body data stored in the processed-body division (15a).

20 6. The CAD system according to one of Claims 1 through 5, wherein a combination of a plurality of tools is stored in a selectable-tool set (19) as the pre-defined work instructions, for each kind of the bodies.

25 7. The CAD system according to one of Claims 1 through 6, wherein each piece of work content information stored in the process-contents division (15b) is an equivalent

to a work instruction in a CAM, deletion of any of the bodies causing deletion of the related work contents.

8. The CAD system according to one of Claims 1 through 5 7, further comprising a body data control unit (11) which, upon specifying and copying the body to another position, stores work contents for this another position in relation to the copy of the body.

10 9. The CAD system according to one of Claims 1 through 8, wherein the process definition group (18) includes a plurality of the processing operations, the system further comprising a body data control unit (11) which creates and displays on a specific area a body corresponding to a 15 processing operation selected from the process definition group (18) upon specification of a location on a drawing.

10. The CAD system according to one of Claims 1 through 9, wherein the system makes three-dimensional display.
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11. A computer program for operating the CAD system according to one of Claims 1 through 10.

12. A recording medium containing a computer program for 25 operating the CAD system according to one of Claims 1 through 10.